Southern Nuclear

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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.3.08.02.i [Index Number 415]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.08.02.i [Index Number 415], for verifying the Service Water System (SWS) pump flow through its Component Cooling Water System (CCS) heat exchanger and that controls and displays are available in the Main Control Room (MCR) as listed in Table 2.3.8-1. The closure process for this ITAAC is based on the guidance described in NEI 08-01, “Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52”, which is endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,

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Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4 ITAAC Completion of ITAAC 2.3.08.02.i [Index Number 415]

JMC/CWM/sfr

cc: Regional Administrator, Region ll
Director, Office of Nuclear Reactor Regulation (NRR)
Director, Vogtle Project Office NRR
Senior Resident Inspector – Vogtle 3 & 4

Southern Nuclear Operating Company
ND-22-0739
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.3.08.02.i [Index Number 415]

ITAAC Statement

Design Commitment

2. The SWS provides the nonsafety-related function of transferring heat from the component cooling water system to the surrounding atmosphere to support plant shutdown and spent fuel pool cooling.

3. Controls exist in the MCR to cause the components identified in Table 2.3.8-1 to perform the listed function.

4. Displays of the parameters identified in Table 2.3.8-1 can be retrieved in the MCR.

Inspections/Tests/Analyses

i) Testing will be performed to confirm that the SWS can provide cooling water to the CCS heat exchangers.

Testing will be performed on the components in Table 2.3.8-1 using controls in the MCR.

Inspection will be performed for retrievability of parameters in the MCR.

Acceptance Criteria

i) Each SWS pump can provide at least 10,000 gpm of cooling water through its CCS heat exchanger.

Controls in the MCR operate to cause the components listed in Table 2.3.8-1 to perform the listed functions.

The displays identified in Table 2.3.8-1 can be retrieved in the MCR.

ITAAC Determination Basis

This ITAAC requires testing and inspections be performed to demonstrate that the Service Water System (SWS) provides the nonsafety-related function of transferring heat from the Component Cooling Water System (CCS) to the surrounding atmosphere to support plant shutdown and spent fuel pool cooling, ensure controls in the Main Control Room (MCR) operate to cause the components listed in Table 2.3.8-1 to perform the listed function, and ensure the displays of parameters identified in Table 2.3.8-1 can be retrieved in the MCR.

i) Each SWS pump can provide at least 10,000 gpm (gallons per minute) of cooling water through its CCS heat exchanger.

Multiple ITAAC were performed to demonstrate the SWS provided the nonsafety-related function of transferring heat from the component cooling water system to the surrounding atmosphere to support plant shutdown and spent fuel pool cooling. Testing was performed in accordance with Unit 4 preoperational test procedure 4-SWS-ITPP-501 (Reference 1), utilizing

Work Order 1206770 (Reference 2), to verify that each SWS pump provided at least 10,000 gpm of cooling water through its CCS heat exchanger.

Initial conditions were established with the SWS train B pump in service with a temporary flow instrument installed upstream of the CCS B heat exchanger. The temporary flow instrument was monitored and the flow value was determined in accordance with B-GEN-ITPA-004 (Reference 4) and verified to be greater than 10,000 gpm. This testing was repeated with the SWS pump A and the A CCS heat exchanger.

The test results demonstrated that the Unit 4 B SWS pump provided 11,795 gpm through Unit 4 B CCS heat exchanger and the Unit 4 A SWS pump provided 11,969 gpm through Unit 4 A CCS heat exchanger and was documented in Reference 2.

These test results confirmed that each SWS pump provided at least 10,000 gpm of cooling water through its CCS heat exchanger.

Controls in the MCR operate to cause the components listed in Table 2.3.8-1 to perform the listed functions.

Testing was performed in accordance with appropriate operating procedures to verify that controls exist in the MCR and the controls operate to cause the components listed in COL Appendix C Table 2.3.8-1 (Attachment A) to perform the listed functions.

The components identified in Attachment A performed their listed function by using controls at an operator workstation in the MCR. Control Room Operators started Service Water Pumps A and B (SWS-MP-01A/B) and verified their discharge valves (SWS-PL-V002A/B) opened from the MCR. Service Water Cooling Tower Fans A and B (SWS-MA-01A/B) were started from an operator workstation in the MCR by adjusting their temperature controllers.

These test results confirmed that controls in the MCR operate to cause the components listed in Attachment A to perform the listed functions and was documented in Reference 3.

The displays identified in Table 2.3.8-1 can be retrieved in the MCR.

An inspection was performed as described in Reference 3 to verify that the displays identified in COL Appendix C Table 2.3.8-1 (Attachment B) can be retrieved in the MCR.

An inspection was conducted at an operator workstation in the MCR and verified all the displays identified in Attachment B can be retrieved. This confirmed that the displays identified in Attachment B can be retrieved in the MCR and was documented in Reference 3.

The completed test results (References 2 and 3) confirm that each SWS pump can provide at least 10,000 gpm of cooling water through its CCS heat exchanger, that the controls in the MCR operate to cause the components listed in Table 2.3.8-1 to perform the listed functions, and that the displays identified in Table 2.3.8-1 can be retrieved in the MCR.

References 2 and 3 are available for NRC inspection as part of the Unit 4 ITAAC Completion Package (Reference 5).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there were no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.3.08.02.i (Reference 5) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.08.02.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. 4-SWS-ITPP-501, Ver. 1.0, “Service Water System Preoperational Test”
2. SV4-SWS-T0W-1206770, Rev. 0, “(ITAAC) 4-SWS-ITPP-501 Preoperational Test”
3. SV4-SWS-ITR-800415, Rev. 0, “Unit 4 Recorded Results of Service Water System Component Test: ITAAC 2.3.08.02.i, Items 3 and 4”
4. B-GEN-ITPA-004, Rev. 33.0, “Conduct of Test”
5. 2.3.08.02.i-U4-CP-Rev0, ITAAC Completion Package

Attachment A

*Excerpt from COL Appendix C Table 2.3.8-1

Equipment Name*	Tag No.*	Control Function*
Service Water Pump A (Motor)	SWS-MP-01A	Start
Service Water Pump B (Motor)	SWS-MP-01B	Start
Service Water Cooling Tower Fan A (Motor)	SWS-MA-01A	Start
Service Water Cooling Tower Fan B (Motor)	SWS-MA-01B	Start
Service Water Pump A Discharge Valve	SWS-PL-V002A	Open
Service Water Pump B Discharge Valve	SWS-PL-V002B	Open

Attachment B

*Excerpt from COL Appendix C Table 2.3.8-1

Equipment Name*	Tag No.*	Display*
Service Water Pump A (Motor)	SWS-MP-01A	Yes (Run Status)
Service Water Pump B (Motor)	SWS-MP-01B	Yes (Run Status)
Service Water Cooling Tower Fan A (Motor)	SWS-MA-01A	Yes (Run Status)
Service Water Cooling Tower Fan B (Motor)	SWS-MA-01B	Yes (Run Status)
Service Water Pump 1A Flow Sensor	SWS-004A	Yes
Service Water Pump 1B Flow Sensor	SWS-004B	Yes
Service Water Pump A Discharge Valve	SWS-PL-V002A	Yes (Valve Position)
Service Water Pump B Discharge Valve	SWS-PL-V002B	Yes (Valve Position)
Service Water Pump A Discharge Temperature Sensor	SWS-005A	Yes
Service Water Pump B Discharge Temperature Sensor	SWS-005B	Yes
Service Water Cooling Tower Basin Level	SWS-009	Yes